Fixed Income

Forward Rates and CMO Portfolio Management

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Chapter in Advances in the Valuation and Management of Mortgage-Backed Securities (Wiley, 1999)

Forward rates, because of their perceived role in forecasting future interest rates, occupy a special place in fixed-income analysis. This chapter focuses on how forward rates are used in analyzing CMOs as well as when this usage is warranted and when it is misguided.

An understanding of forward rate is important for valuing fixed-income securities in general, and specifically for valuing CMOs, but several misconceptions about the relationships have become entrenched. It is often aid that OAS models are biased because they assume forward rates as a base case. While the models do make extensive use of forward rates, they make no assumptions about the investor's true expectations for future rates.

The methodology employed by OAS models is consistent with any expectations about the degree of forward rates' predictive power, and consistent with securities such as mortgages that have the possibility of prepayment. A more valid criticism of OAS modeling is that OAS models assume that prepayments are perfectly predictable, given current and past interest rates.

It is often said that because forward rates are unlikely to be realized, one should purchase more bulleted securities that outperform if the curve stays steep. This is a valid strategy for an overall portfolio structure, but it doesn't help in the case of individual security selection. Individual security selection should be approached with consideration of the relative richness and cheapness of each possible purchase.

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